STATE CORONER'S COURT
OF NEW SOUTH WALES

Inquest:	Inquest into the death of Giovanni Tripodi
Hearing dates:	28 October 2014
Date of findings:	24 June 2015
Place of findings:	NSW State Coroner's Court - Glebe
Findings of:	Magistrate Michael Barnes, State Coroner
Catchwords:	CORONIAL LAW – Cause and manner of death; adequacy of hospital care
File number:	2012/311631
Representation:	Senior Sergeant Harding assisting the State Coroner Ms KC Morgan representing South Western Sydney Local Health District Ms Danielle Simmons representing Dr Isuru Ratnayake Mr Cameron Jackson representing Drs Oyman and Kabir
Findings:	**Identity of deceased** The deceased person was Giovanni Tripodi. **Date of death** He died on 7 or 8 October 2012. **Place of death** Mr Tripodi died in his home at Edensor Park, New South Wales. ***Manner of death*** He died from the injuries sustained in a motor vehicle crash on a background of geriatric frailty. ***Cause of death*** The cause of Mr Tripodi's death was the combined effects of chest injuries and old age.

Table of Contents

The Coroners Act 2009 (NSW) *in s81 (1) requires that when an inquest is held, the coroner must record in writing his or her findings as to various aspects of the death.*

These are the findings of an inquest into the death of Giovanni Tripodi.

Introduction

Mr Tripodi was 91 years old when he was found by his son, dead on the floor of his home. There was nothing about the circumstances of his death to raise any suspicion of third party involvement in the death. An autopsy failed to reveal a disease that could explain his death although it did show multiple rib fractures. As he had been taken to hospital the day before following his being involved in a motor vehicle crash, the investigation focused on whether he had received appropriate care at the hospital and whether the injuries caused his death.

The evidence

Social and medical history

Mr Tripodi immigrated to Australia from his native Italy in 1961. A year later his wife and children joined him. From that time Mr and Mrs Tripodi lived at Edensor Park. In 1967 they bought four blocks of land on which they lived the rest of their lives.

The family conducted a market garden on the land and was largely self-sufficient. In addition to tending the crops, Mr Tripodi also worked full-time as a labourer or process worker with various employers.

He retired in approximately 1977 and soon after stopped market gardening commercially but continued to grow food for his wife and himself.

Mr Tripodi's wife died in 2003. He continued to live in the same house alone with the support of his two younger children in particular.

He was in good health all of his life having only been treated for slightly raised blood pressure and a bladder cyst in 2005. He did however have occasional accidents at work and at home. In particular, in December 2008 or January 2009 he fell at home and broke three ribs - the 4th, 5th and 6th or the right side and probably his right scapula. He was hospitalized for a number of days as a result but seems to have made a complete recovery.

The car crash

Neither Mr Tripodi nor his wife was licensed to drive. Consequently, one of their children regularly took them shopping or on other outings.

It had been arranged for Mr Tripodi to go the home of his daughter Concetta Pulice and her family on 6 October 2012 for a family function. She collected him from his home at about 8.00am.

Shortly before 9.00am the car which Ms Pulice was driving and in which Mr Tripodi was the front seat passenger collided with another vehicle when the other car turned across in front of them. Ms Pulice estimated she was travelling at 45 – 50 km/hr at

the time of the crash. The impact caused both front airbags to activate and her car was knocked sideways into a street sign.

Both Ms Pulice and Mr Tripodi were taken by ambulance to the Liverpool Hospital.

Events at the Liverpool Hospital

On arrival at Liverpool Hospital at 9:19am, the ambulance paramedics in their handover of the case to the Emergency Department staff gave brief details of the crash and reported that Mr Tripodi had complained of pain in his sternum, neck and left shoulder. In view of his injuries and age Mr Tripodi was triaged as a category 2 patient and the callout of a Trauma Team was activated. Dr Zeynep Oyman was leading the Trauma Team as the Emergency Department Registrar.

In his statement Dr Oyman relayed that his role was to oversee and manage the care of the patient. He recorded information provided to him by the team member undertaking the primary survey. The chart notes that Mr Tripodi had sternal pain and right lateral chest wall pain. There was no bruising or crepitus or seat belt marks. There was no neck or shoulder pain found on examination and his neck was clinically cleared.

A portable x-ray of his supine chest was carried out. The team reviewed the x-rays and Dr Oyman noted the right ribs were abnormal. However, he considered what he could see on the images was not congruent with the clinical symptoms. He said:

> *The surgical registrar and I discussed the x-ray and were of the view that the degree of abnormality in the chest x-ray did not correlate with the clinical examination and the mechanism of the injury. I therefore considered that the abnormalities were possibly due to previous trauma.*

Accordingly, he requested a departmental chest x-ray be undertaken.This was done at about 10:20am. Dr Oyman also ordered analgesia and while the chart only shows paracetamol being given at 1.30pm Mr Tripodi's son recalls him receiving tablets for his pain soon after he arrived in the ED.

At about midday, Mr Tripodi was transferred to the Emergency Short Stay Unit (ESSU) where Dr Oyman provided a verbal handover to Dr Ratnayake, a Junior Emergency Registrar. The ESSU is a facility designed for patients to be monitored pending a decision to admit or discharge them.

Dr Ratnayake states she was told that Mr Tripodi was clinically stable and was being put in the short stay area to have departmental x-rays. She says she was told that an initial chest x-ray showed abnormalities on the right side, however they appeared to be old fractures as he was not in any significant pain. She was told that Mr Tripodi complained of left shoulder and sternal pain and she understood that if there were no abnormalities on the departmental x-rays, the plan was for him to be discharged home.

Dr Ratnayake examined him by palpating his ribs and chest wall on both sides. She recorded "*tender right lateral chest wall."*

She describes the rest of her assessment of the patient in the following terms:

> *After my examination, I viewed Mr Tripodi's departmental x-rays. I recall closely reviewing the sternal views and what I could see of the left shoulder on the x-rays, as this correlated with clinical tenderness. I could not detect any*

> *acute sternal fractures or fractures of the left shoulder. I do not recall seeing any gross abnormalities on the departmental PA chest x-ray.*
>
> *If Mr Tripodi had any acute rib fractures, I would have expected him to express pain on coughing. I would also have expected that he would have had difficulties breathing. Mr Tripodi did not report pain on coughing or difficulties breathing.*

Dr Ratnayake says she told Mr Tripodi's son that there did not appear to be any new fractures and that it was likely his father's pain was musculoskeletal in origin. She says she also told Mr Tripodi's son to monitor him and to bring him back to the ED if he had any concerns. She recommended simple analgesia. The chart shows Endone was ordered but it is unclear if it was administered.

Mr Tripodi was discharged from Liverpool Hospital at about 2:41pm.

The next day, at about 12.20pm, a senior radiologist, Dr Jeffrey Sacks, reported on the x-rays taken the day before. His report on the portable x-rays stated there were "*multiple posterior rib fractures*" visible and "*extrapleural thickening consistent with haematoma*." His report in relation to the departmental x-rays advised that "*There are multiple displaced right posterolateral rib fractures with associated extrapleural haematomas."* He also noted there was "*an old fracture (of the) inferior right scapular blade.*"

In a third statement obtained as a result of the lawyers for the Local Health District not wanting to accept the obvious meaning of those reports Dr Sacks confirmed his observations: "*There are several displaced right-sided posterolateral rib fractures. Some of these rib fractures appear new (acute) whereas others are old (chronic)".*

Post hospital care

About 8:15am on Sunday 7 October, the deceased's son Frank visited his father. Mr Tripodi complained that his chest was sore. His son observed that it was "swollen". There was no improvement regarding the pain throughout the day.

At about 11:00, his daughter Concetta attended Mr Tripodi's house. She states that her father's condition appeared to be deteriorating and that he appeared to be in pain. She described him holding his chest stating, "*It feels like there is something in there, like I need to burp".* Concetta further described her father's condition: "*While he was asleep he was moaning very loudly, every now and again he would yell like he was having a nightmare"*

She phoned for an on call doctor. Dr Kabir attended the residence around 7:00pm. He examined Mr Tripodi who complained of mild pleuritic chest pain during deep respiration. According to Frank, Dr Kabir said;

> *Because he has a bit of bruising, he may not be taking a full breath so he needs to exercise it, he needs to breathe deeply, hold it for a few seconds, before breathing out. If he can do this a few times a day it will help his lungs. He will be fine, he will be fine.*

In his statement prepared for the inquest Dr Kabir stated, "*Clinically there was no obvious rib fracture however a strain could not be excluded".* Frank claims that the doctor did not palpate his father's chest. However, the doctor's statement says; *"I examined Mr Tripodi."* I am unable to resolve this apparent conflict.

The death

Frank called by his father's house on his way to work the next morning but was unable to raise him. He went back at about 10:30am. The house was locked. He forced entry. The hall lights were on and the shutters were closed. The bed appeared not to have been slept in. Frank found his father lying face down with his arms outstretched above his head on the floor in the lounge room floor. He was wearing a singlet, shirt, socks and trousers. There was a book beside him and a pillow near his head that was soaked in some fluid that may have been vomit.

Frank called 000 and an ambulance soon came and confirmed that Mr Tripodi had been dead for some time.

Police attended and determined there was nothing suspicious about the death. They had Frank formally identify his father's body to them. Photographs were taken of Mr Tripodi's body *in situ*.

Investigation

Autopsy results

On 10 October an autopsy was undertaken on Mr Tripodi's body by an experienced forensic pathologist. It revealed evidence of acute blunt force trauma to the chest with multiple fractures to the following ribs:

- Fracture to the 2nd to 10th ribs anterolaterally.
- Fracture to the 2nd to 8th right ribs anteriorly.
- Fracture to the 3rd to 7th right ribs parasternally.
- Fracture of the 2nd to 6th and 8th to 9th left ribs anterolaterally.
- Fracture of the 3rd to 7th left ribs anteriorly.
- Fracture of the 3rd left rib parasternally.
- Fracture of the mid sternum.

There was no evidence of healing of most of the fractures, which would suggest, according to the forensic pathologist, that the majority occurred within days prior to the death. There was also little or no blood loss associated with some of the fractures which indicates they may have occurred about the time of death. There was evidence of osteoporosis.

However there was no associated pneumothorax, haemothroax or bronchopneumonia or indeed any other injury or disease that could be definitively identified as the cause of Mr Tripodi's death.

There was bruising of the chest that the autopsy photographs suggest was caused by the seatbelt Mr Tripodi was wearing when he was involved in the car crash.

Analysis of Mr Tripodi's blood showed elevated levels of codeine, morphine and paracetamol but neither singly nor in combination were the drugs likely to have caused his death.

Independent reviews

Two independent reviews were commissioned in order to assist the court determine the manner and cause of death and to critique the quality of care given to the deceased with a view to the making of preventative recommendations if that was appropriate.

Dr James Linklater, a consultant radiologist reviewed the hospital records including the x-rays, the relevant statements of the treating doctors and the autopsy report. He concluded that the x-rays did not allow him to distinguish between acute fractures and old healed fractures. However he recognised that plain x-ray is relatively poor in detecting rib and sternal fractures and that the x-rays taken of Mr Tripodi on 6 October "*remain consistent with the post mortem findings*."

Dr John Roberts, an accident and emergency physician also reviewed the brief material, but not the report of Dr Linklater. He too agreed with the statement made by the ED doctors that there were "*no obvious fractures*" in the x-rays of Mr Tripodi's chest. He was generally in agreement with the treatment provided at the Liverpool Hospital in that he was of the view the response to the presentation should have been to rule out treatable complications and to provide pain relief. He also observed:

> *If there are multiple rib fractures diagnosed and/or the patient is unable to be mobilized safely they should be admitted.*

Although not asked to, Dr Roberts speculated that if Mr Tripodi had fallen at home he may have fractured ribs or fractured more ribs and died from a cardiac arrhythmia.

Conclusions

According to Dr Sacks, Mr Tripodi had multiple acute rib fractures when he presented to Liverpool hospital on the day of the car crash. Dr Linklater could not detect them when he reviewed the x-rays but acknowledges all of the fractures found at autopsy could well have been present when the x-rays were taken. Mr Tripodi complained of a sore chest before and after his discharge. It was most pronounced on inhalation. The autopsy photographs show a clear seat belt bruise. The x-ray images revealed extrapleural haematomas which are usually associated with rib fractures. Conversely, at autopsy some of the fractures showed no signs of blood loss.

As a result of considering this evidence, I consider it more likely than not that Mr Tripodi suffered rib fractures in the car crash. These fractures would have been very painful and affected his capacity for effective respiration. This may well have led to him falling in his home. Even if oxygen deficit was not the cause of the fall, it is likely that when he hit the tiled floor more rib fractures occurred. This would have further comprised his ability to breathe which in turn would have made it impossible for him to get up and/or call for help. These new fractures did not bleed because Mr Tripodi died almost immediately as a result of being overwhelmed by his incapacity. He was old and frail and the injuries overcame him. I am unable to determine whether he fell and died on the evening of 7 October or in the early hours of 8 October.

Mr Tripodi should not have been discharged on the day of the crash when he had suffered rib fractures. However, Dr Linklater and Dr Roberts said they could not detect any acute rib fractures when they reviewed the x-rays taken of Mr Tripodi's chest on that day. In those circumstances, when the clinician in the ESSU had reviewed those x-rays and seen nothing of concern and when his clinical signs and symptoms did not indicate any significant injuries her decision to discharge Mr Tripodi was not unreasonable.

The mistake was made because the x-rays taken shortly after 10:00am on 6 October were not reviewed and reported on by a sufficiently skilled and experienced specialist until after midday the following day. Further, when the fractures were detected and reported on by Dr Sacks there was no specific policy in place to cause his findings to be reviewed by the team who had managed the patient's care or any mechanism for the information to be conveyed to the patient. There was however a procedure whereby the x-ray results were sent to a consultant in the ED for checking as to whether they had been appropriately acted upon. It is unclear why this didn't happen in this case. Had it occurred, it is likely Mr Tripodi would have been contacted and invited to return to the hospital if he was in pain. That may have led to a different outcome.

I am satisfied, that as a result of the review of the handling of this case, the hospital has taken steps to improve its policies to make it more likely test results will be actively reviewed and acted upon, even if the patient was not admitted or has been discharged. Those policies, if adhered to, will make it less likely a death will occur in similar circumstances in future.

Findings required by s81(1)

As a result of considering all of the documentary evidence and the oral evidence heard at the inquest, I am able to confirm that the death occurred and make the following findings in relation to it.

The identity of the deceased

The deceased person was Giovanni Tripodi.

Date of death

He died on 7 or 8 October 2012.

Place of death

Mr Tripodi died in his home at Edensor Park, New South Wales.

Manner of death

He died from the injuries sustained in a motor vehicle crash on a background of geriatric frailty.

Cause of death

The cause of Mr Tripodi's death was the combined effects of chest injuries and old age.

I close this inquest.

Magistrate M A Barnes

State Coroner